

[0023] In example embodiments, the method may further include removing the water-soluble coating layer prior to mounting the semiconductor package to a board.

[0024] In example embodiments, the forming of the plurality of terminals may include forming the plurality of terminals on connection pads that are formed within the second surface of the substrate.

[0025] In example embodiments, the method may further include sectioning the semiconductor package to separate the plurality of semiconductor chips from each other, and forming a shielding layer on at least one of the plurality of separated semiconductor chips, the shielding layer covering a top surface and side surfaces of the at least one of the separated plurality of semiconductor chips.

BRIEF DESCRIPTION OF THE DRAWINGS

[0026] Example embodiments will be more clearly understood from the following brief description taken in conjunction with the accompanying drawings. The accompanying drawings represent non-limiting, example embodiments as described herein.

[0027] FIG. 1 is a sectional view illustrating a semiconductor package according to example embodiments of the inventive concepts.

[0028] FIGS. 2A to 2E are sectional views illustrating a method of fabricating a semiconductor package, according to example embodiments of the inventive concepts.

[0029] FIGS. 3A and 3B are sectional views illustrating a method of connecting a semiconductor package to a board, according to example embodiments of the inventive concepts.

[0030] FIGS. 4A and 4B are sectional views illustrating a method of connecting a semiconductor package to a board, according to example embodiments of the inventive concepts.

[0031] FIGS. 5A to 5C are sectional views illustrating a method of connecting a semiconductor package to a board, according to example embodiments of the inventive concepts.

[0032] It should be noted that these figures are intended to illustrate the general characteristics of methods, structure and/or materials utilized in example embodiments and to supplement the written description provided below. These drawings are not, however, to scale and may not precisely reflect the precise structural or performance characteristics of any given example embodiment, and should not be interpreted as defining or limiting the range of values or properties encompassed by the example embodiments. For example, the relative thicknesses and positioning of molecules, layers, regions and/or structural elements may be reduced or exaggerated for clarity. The use of similar or identical reference numbers in the various drawings is intended to indicate the presence of a similar or identical element or feature.

DETAILED DESCRIPTION

[0033] The inventive concepts will now be described more fully hereinafter with reference to the accompanying drawings, in which example embodiments of the inventive concepts are shown. The inventive concepts and methods of achieving them will be apparent from the following example embodiments that will be described in more detail with reference to the accompanying drawings. The example

embodiments of the inventive concepts may, however, be embodied in different forms and should not be constructed as limited to the example embodiments set forth herein. Rather, these embodiments are provided so that this disclosure will be thorough and complete, and will fully convey the scope of the inventive concepts to those skilled in the art.

[0034] As used herein, the singular terms “a,” “an” and “the” are intended to include the plural forms as well, unless the context clearly indicates otherwise. It will be understood that when an element is referred to as being “connected” or “coupled” to another element, it may be directly connected or coupled to the other element or intervening elements may be present.

[0035] Similarly, it will be understood that when an element such as a layer, region or substrate is referred to as being “on,” “connected” or “coupled” to another element, it can be directly on, directly connected or directly coupled to the other element or intervening elements may be present. In contrast, the term “directly” means that there are no intervening elements. When an element is referred to as being “directly on,” “directly connected” or “directly coupled” to another element, there are no intervening elements present. Further, it will be understood that when a layer is referred to as being “under” another layer, it can be directly under or one or more intervening layers may also be present. In addition, it will also be understood that when a layer is referred to as being “between” two layers, it can be the only layer between the two layers, or one or more intervening layers may also be present. Additionally, the embodiment in the detailed description will be described with sectional views as ideal example views of the inventive concepts. Accordingly, shapes of the example views may be modified according to manufacturing techniques and/or allowable errors. Therefore, the embodiments of the inventive concepts are not limited to the specific shape illustrated in the example views, but may include other shapes that may be created according to manufacturing processes.

[0036] It will be understood that, although the terms “first,” “second,” etc. may be used herein to describe various elements, components, regions, layers and/or sections, these elements, components, regions, layers and/or sections should not be limited by these terms. These terms are only used to distinguish one element, component, region, layer or section from another element, component, region, layer or section. Thus, a first element, component, region, layer or section discussed below could be termed a second element, component, region, layer or section without departing from the teachings of example embodiments.

[0037] In the drawing figures, the dimensions of layers and regions may be exaggerated for clarity of illustration.

[0038] Spatially relative terms, such as “beneath,” “below,” “lower,” “above,” “upper” and the like, may be used herein for ease of description to describe one element or feature’s relationship to another element(s) or feature(s) as illustrated in the figures. It will be understood that the spatially relative terms are intended to encompass different orientations of the device in use or operation in addition to the orientation depicted in the figures. For example, if the device in the figures is turned over, elements described as “below” or “beneath” other elements or features would then be oriented “above” the other elements or features. Thus, the example term “below” can encompass both an orientation of above and below. The device may be otherwise oriented